

REMARKS / ARGUMENTS

Claims 55-67 remain pending in this application. Claims 1-55 have been canceled without prejudice or disclaimer. New claims 56-67 have been added.

35 U.S.C. §§102 and 103

Claims 24-30 stand rejected under 35 U.S.C. §102(b) as being anticipated by Eshel et al (U.S. Patent No. 5,535,375). Claims 31-39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Eshel et al in view of Senator et al (U.S. Patent No. 5,761,677). These rejections are traversed as follows.

The previously pending claims have been canceled without prejudice or disclaimer in favor of new claims which have been prepared to clarify the distinctive features of the present invention in order to expedite prosecution. According to the presently claimed invention, the gateway apparatus coupled to a client computer and file server via a network includes a first interface which receives a first type file access request from the client computer based on a first type protocol, a second interface which issues a second type file access request to the file server based on a second type protocol, a processing unit and a memory as recited in claim 56. Claim 62 recites a gateway apparatus including similar features but specifies an interface which receives a first type file access request based on a first type protocol and outputs a second type file access request based on a second type protocol. The first

type file access request includes a path name indicating a directory including a file to be accessed and a file name indicating the file. The file name is a first type of unique identifier in the directory. The second type file access request includes a file ID which is a second type of unique identifier in the file server and indicates the file.

When a first command of the first type file access request is received from the client computer, the first command including a first set of a first path name and a first file name related to a first file and instructing to write the first file, it is determined whether or not the first file is already created or not in the file server. If the first file has not already been created, a second command of the second type file access request is sent to the file server in order to create the first file which is assigned a first file ID of the second type protocol in the file server.

On the other hand, if the first file has been created in the file server, a third command of the second type file access request is sent to cause the file server to create a second file which includes updated data of the first file and is assigned a second file ID of the second type protocol in the file server that is different from the first file ID. Therefore, the first command of the first type file request from the client computer can use the same file name even though the file is updated, while the second and third commands of the second type file access request use different file IDs when data is updated. In other words, the second type protocol used by the file server prohibits updating contents stored in a file (referred to as "write once read many").

As a result the gateway apparatus needs to convert a plurality of write requests received from the client computer for updating contents of a first file indicated by a first set of a path name and a file name into a plurality of commands, each of which causes the file server to create a new file, assign a new file ID, and include updated contents of the first file. Therefore, the user of a client computer can use the file server by using a common protocol such as NFS or CFIS.

Eshel, on the other hand, discloses a host computer coupled to heterogeneous clients. The host computer has a plurality of protocol converters, each of which is used for each of the heterogeneous clients respectively to convert each protocol used by each client to a common application program interface (API) protocol. The host computer stores a file access from each of the heterogeneous clients by using a file name based on the common API protocol. Eshel does not disclose that, in response to receiving a file access request from one of the heterogeneous clients, the host computer sends a plurality of commands to another one of the heterogeneous clients since each protocol converter of Eshel is independent from one another and is used only for one client.

The deficiencies in Eshel are not overcome by Senator. Senator merely discloses a plurality of version index structures related to update in a file system. Senator does not disclose or suggest sending a plurality of commands causing another device to create a new file in response to receiving a write request from a client computer.

Request for Interview

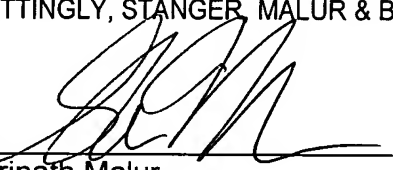
Applicant requests that the Examiner conduct an interview with the undersigned prior to the issuance of a subsequent Office Action. In this regard, the Examiner is hereby invited to contact the undersigned by telephone in order to arrange for an appropriate time for the interview.

Conclusion

In view of the foregoing, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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